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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,348	09/19/2006	Hitomi Teraoka	500.46545X00	9951

20457 7590 08/20/2009

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EXAMINER	
LEE, ANDREW CHUNG CHEUNG	
ART UNIT	PAPER NUMBER
2419	

NOTIFICATION DATE	DELIVERY MODE
08/20/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/593,348	TERAOKA ET AL.	
	Examiner	Art Unit	
	Andrew C. Lee	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 July 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6 and 8* is/are pending in the application.

4a) Of the above claim(s) *7 and 9-22* is/are withdrawn from consideration.

5)☒ Claim(s) *8* is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Claims 1 – 6, 8 have been amended and are pending.

Claims 7, 9 – 22 have been cancelled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3, 5, 2, 4, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sumida (US 20070242698 A1) in view of Abrol et al. (US 6785823 B1).

Regarding claims 1, 3, 5, Sumida discloses a packet data serving node for connecting a communication terminal device to a public network by using Point to Point Protocol (PPP) *("PPP terminating equipment" as packet data serving node; Fig. 1, Fig.7, para. [0002])*, comprising: Link Control Protocol (LCP) phase processing means *(element 20, Fig. 1, paras. [0007], [0061])*; Network Control Protocol (NCP) phase processing means *(element 22, Fig. 3, para. [0069]);* decision means for deciding a layer 3 protocol type of a reception PPP packet (*paras. [0068], [0069])*; and control means *(element 23, element 90 microprocessor, Fig. 3, para. [0069])*, the decision means receives the NCP start request message from the communication terminal device, and refers to a protocol field in the received NCP start request message to

decide the layer 3 protocol type used by the communication terminal device *(paras. [0083], [0084], Fig. 5)*, and the control means controls the NCP phase processing means to transmit a NCP start request message set with the layer 3 protocol type decided by the decision means to the communication terminal device *(Fig. 3, para. [0069], [0083], [0084], Fig. 5)*, except wherein, in a NCP phase after an LCP phase is completed, the control means controls the NCP phase processing means not to transmit any NCP start request message to the communication terminal device before receiving a NCP start request message from the communication terminal device.

Sumida does not disclose explicitly wherein, in a NCP phase after an LCP phase is completed, the control means controls the NCP phase processing means not to transmit any NCP start request message to the communication terminal device before receiving a NCP start request message from the communication terminal device.

Abrol et al. in the same field of endeavor disclose explicitly wherein, in a NCP phase after an LCP phase is completed *("LCP C-Ack"; Fig. 4, col. 8, lines 30 – 42)*, the control means controls the NCP phase processing means not to transmit any NCP start request message to the communication terminal device before receiving a NCP start request message from the communication terminal device *(Fig. 4, col. 8, lines 43 – 52, lines 60 – 66, col. 9, lines 1 – 7)*.

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Sumida to include the features of wherein, in a NCP phase after an LCP phase is completed, the control means controls the NCP phase processing means not to transmit any NCP start request message to

the communication terminal device before receiving a NCP start request message from the communication terminal device as taught by Abrol et al. One of ordinary skill in the art would be motivated to do so for providing an improved method and system for performing authentication of a wireless mobile station with a packet data network *(as suggested by Abrol et al., see col. 1, lines 10 – 12).*

Regarding claims 2, 4, Sumida discloses a packet data serving node for connecting a communication terminal device to a public network by using Point to Point Protocol (PPP) *) ("PPP terminating equipment" as packet data serving node; Fig. 1, Fig.7, para. [0002])*, comprising: Link Control Protocol (LCP) phase processing means *(element 20, Fig. 1, paras. [0007], [0061])*; a plurality of Network Control Protocol (NCP) phase processing means *(Fig. 5, elements 509, 511, element 22, Fig. 3, para. [0069]);* decision means for deciding a layer 3 protocol type of a reception PPP packet; and control means (*paras. [0068], [0069])*; the decision means receives the NCP start request message from the communication terminal device, and refers to a protocol field in the received NCP start request message to decide the layer 3 protocol type used by the communication terminal device *(paras. [0083], [0084], Fig. 5)*, and the control means selects one of said NCP phase processing means corresponding to the layer 3 protocol used by said communication terminal device in accordance with the layer 3 protocol type decided by the decision means, and makes said selected NCP phase processing means transmit a NCP start request message destined to said communication terminal device *(Fig. 3, para. [0069], [0083], [0084], Fig. 5)*,except

wherein, in a NCP phase after an LCP phase is completed, the control means controls the NCP phase processing means not to transmit any NCP start request message to the communication terminal device before receiving a NCP start request message from the communication terminal device,

Abrol et al. in the same field of endeavor disclose explicitly wherein, in a NCP phase after an LCP phase is completed *("LCP C-Ack"; Fig. 4, col. 8, lines 30 – 42),* the control means controls the NCP phase processing means not to transmit any NCP start request message to the communication terminal device before receiving a NCP start request message from the communication terminal device *(Fig. 4, col. 8, lines 43 – 52, lines 60 – 66, col. 9, lines 1 – 7).*

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Sumida to include the features of wherein, in a NCP phase after an LCP phase is completed, the control means controls the NCP phase processing means not to transmit any NCP start request message to the communication terminal device before receiving a NCP start request message from the communication terminal device as taught by Abrol et al. One of ordinary skill in the art would be motivated to do so for providing an improved method and system for performing authentication of a wireless mobile station with a packet data network *(as suggested by Abrol et al., see col. 1, lines 10 – 12).*

Regarding claim 6, Sumida discloses a communication connection apparatus for connecting a communication terminal to a public network by using Point to Point Protocol (PPP) via a provider network *("PPP terminating equipment" as a communication connection apparatus; Fig. 1, Fig.7, para. [0002], [0003])* comprising: a reception unit which receives packets from the communication terminal via an interface of the provider network *(element 10, line reception section, Fig. 1, para. [0003], [0060])*; and a transmission unit which transmits packets to the communication terminal via the interface of the provide network (element 80 line transmission section; *Fig. 1, para. [0003], [0060]);* a control unit *(element 23, element 90 microprocessor, Fig. 3, para. [0069])*, when the reception unit receives the NCP start request packet from the communication terminal, the control unit decides a NCP layer 3 protocol type of a received packet based on layer 3 protocol type identification information in a field of the NCP start request packet received by the reception unit, and controls the transmission unit to transmit a NCP start request packet of the decided protocol type to the communication terminal *(Fig. 3, para. [0069], [0083], [0084], Fig. 5)*, except wherein, in a Network Control Protocol (NCP) process after a Link Control Protocol (LCP) process and an authentication process are completed, the control unit does not transmit any NCP start request packet to the communication terminal before receiving a NCP start request packet from the communication.

Abrol et al. in the same field of endeavor teach wherein, in a Network Control Protocol (NCP) process after a Link Control Protocol (LCP) process and an authentication process are completed *("LCP C-Ack", CHAP Success"; Fig. 4, col. 8,*

lines 30 – 42),, the control unit does not transmit any NCP start request packet to the communication terminal before receiving a NCP start request packet from the communication terminal *(Fig. 4, col. 8, lines 43 – 52, lines 60 – 66, col. 9, lines 1 – 7).*

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Sumida to include the features of wherein, in a Network Control Protocol (NCP) process after a Link Control Protocol (LCP) process and an authentication process are completed, the control unit does not transmit any NCP start request packet to the communication terminal before receiving a NCP start request packet from the communication as taught by Abrol et al. One of ordinary skill in the art would be motivated to do so for providing an improved method and system for performing authentication of a wireless mobile station with a packet data network *(as suggested by Abrol et al., see col. 1, lines 10 – 12).*

Allowable Subject Matter

4. Claim 8 is allowed.

5. The following is an examiner's statement of reasons for allowance:

The prior art made of record, in single or in combination, fails to disclose explicitly the limitations of "a statistic processing unit which statistically process types of layer 3 protocols used in PPP; and a control unit, wherein, in a Network Control Protocol (NCP) occurring after completing a Link Control Protocol (LCP) process and an authentication process, the control unit decides a type of layer 3 protocol to be used for the communication with the communication terminal based on a statistics processing result performed by the statistics processing unit, and transmits a NCP start request packet of the decided layer 3 protocol type from the transmission unit" as disclosed in claim 8.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

7. Applicant's arguments filed on 7/09/2009 with respect to claims 1 – 6, 8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) Kitada et al. (US 20030037163 A1).
b) Bhatia et al. (6052803).
c) Dunk (US 20040264465 A1).
d) Simonnet et al. (US 20040081201 A1).
e) Sasaki et al. (US 7260107 B1).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C Lee/
Examiner, Art Unit 2419
<8/14/2009::4Qy09>
/Ayaz R. Sheikh/
Supervisory Patent Examiner, Art Unit 2419